

Local heating of the universe by the Higgs field

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Abstract

© 2018 World Scientific Publishing Company It is shown that the creation of primordial massive black holes is accompanied by a local heating of the matter. The developed mechanism is based on the interaction of the Higgs field and a scalar field responsible for black hole formation. We also consider dynamical behavior of parameters such as a scale and chemical composition of such heating regions.

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Keywords

abnormal chemical composition, early universe, Higgs field, primordial black holes